

What is claimed is:

1. A semiconductor device comprising:

a plurality of semiconductor chips each of which has a front side formed with a plurality of integrated circuits and a back side, the semiconductor chips being stacked;

a first conductive pattern electrically connecting the integrated circuits;

an external terminal electrically connected to the first conductive pattern; and

an encapsulating resin for encapsulating the semiconductor chips and the first conductive pattern.

2. The semiconductor device according to claim 1, wherein the semiconductor chips include first and second semiconductor chips, the second semiconductor chip is mounted on the first semiconductor chip as the back side of the second semiconductor chip faces the front side of the first semiconductor chip, and a passivation film is formed on the front side of the second semiconductor chip.

3. The semiconductor device according to claim 1, wherein the semiconductor chips include first and second semiconductor chips, and the second semiconductor chip is mounted on the first semiconductor chip as the back side of the second semiconductor chip faces the front side of the first semiconductor chip, and wherein the semiconductor device further includes a plurality of pad electrodes formed on the front side of the first

semiconductor chip and electrically connected to the integrated circuits, a second conductive pattern for connecting the adjacent pad electrodes, and a post electrode formed on the second conductive pattern for electrically connecting between the second conductive pattern and the external terminal.

4. The semiconductor device according to claim 3, wherein the post electrode is formed near almost a center part of the second wiring.

5. The semiconductor device according to claim 1, wherein the semiconductor chips include first and second semiconductor chips, the second semiconductor chip is mounted on the first semiconductor chip as the back side of the second semiconductor chip faces the front side of the first semiconductor chip, and wherein the semiconductor device further includes

a first post electrode formed on the first conductive pattern for electrically connecting between the first wiring and the external terminal, and

a second post electrode formed on the front side near the periphery of the first semiconductor chip simultaneously with the first post electrode, the second post electrode for recognizing the periphery of the first semiconductor chip.

6. The semiconductor device according to claim 1, wherein the semiconductor chips include first and second semiconductor chips, the second semiconductor chip is mounted on the first semiconductor chip as the front side of the second semiconductor

chip faces the front side of the first semiconductor chip, and wherein the semiconductor device further includes

a plurality of post electrodes for electrically connecting between the first conductive pattern and the external terminal, the plurality of the post electrodes formed on the first conductive pattern so as to surround the second semiconductor chip,

a first encapsulating resin for encapsulating the periphery of the post electrodes, and

a second encapsulating resin for encapsulating the second semiconductor chip.

7. The semiconductor device according to claim 1, wherein the semiconductor chips include first and second semiconductor chips, the second semiconductor chip has a first encapsulating resin formed on the front side of the second semiconductor chip, and a projecting electrode electrically connected to the integrated circuit of the second semiconductor chip and projecting from the first encapsulating resin, and the second semiconductor chip is mounted on the semiconductor chip so as to connect to the first conductive pattern.

8. The semiconductor device according to claim 7, wherein the first conductive pattern is provided with an opening part, and the projecting electrode is placed on the opening part of the first conductive pattern.

9. The semiconductor device according to claim 7, wherein

the first conductive pattern is provided with a recess, and the projecting electrode is placed on the recess of the first conductive pattern.

10. The semiconductor device according to claim 7, wherein the projecting electrode is connected to the first conductive pattern through an adhesive material.

11. The semiconductor device according to claim 1, wherein the semiconductor devices includes first and second semiconductor chips, and the front side of the second semiconductor chip is connected to the front side of the first semiconductor chip through an adhesive material.

12. The semiconductor device according to claim 1, wherein the semiconductor chips includes first to third semiconductor chips, the second semiconductor chip is mounted on the first semiconductor chip as the front side of the second semiconductor chip faces the front side of the first semiconductor chip, and the third semiconductor chip is mounted on the second semiconductor chip as the back side of the third semiconductor chip faces the back side of the second semiconductor chip.